

Patent No. 4,977,558). Applicant respectfully traverses these rejections for the reasons presented below.

Claim 22 of the present invention specifies determining a terminal-unit signal to be sent to a corresponding terminal for each of a plurality of time slots of the input signal, time-divisionally dividing each terminal-unit signal into first N signals within a corresponding time slot, converting the first N signals into second N signals having a lower transmission rate than that of the first N signals, and providing the second N signals separately to a plurality of base stations. Claim 23 recites similar language.

Referring to Figs. 2 and 3 of the present application, within each of the time slots of the time-multiplexed input signal is a signal for one of the terminal units (i.e., a terminal-unit signal). For each time slot, the terminal unit signal contained in the time slot is time-divisionally divided into a number of signals equal to the number of radio base stations (not including redundant radio base stations), with each of the divided signals containing a **different portion** of the terminal-unit signal. For example, the terminal-unit signal A1 is divided into signals A1-1, A1-2, and A1-3, with signal A1-1 containing the beginning part of terminal-unit signal A1, signal A1-2 containing the middle part of terminal-unit signal A1, and signal A1-3 containing the end part of terminal-unit signal A1. < \*

Referring to Fig. 1 of the Nishimura reference, a digital audio processing apparatus (22a, 22b, etc.) is provided for each message channel. The data multiplexing and separating circuit 21 separates the multiplexed signal received from the mobile communication exchange station 1 for each message channel to provide a single demultiplexed signal to each digital audio signal processing apparatus. See Nishimura at col. 2, lines 14-20. Thus, Nishimura merely discloses demultiplexing a signal into a number of signals equal to the number of channels, and does not disclose subdividing each channel signal.

The admitted prior art does not disclose dividing the signal within each time slot into multiple signals, as indicated by the Examiner on page 6 of the Office Action. //<

The Iguchi reference discloses latch means 16 and a latch part 26 for demultiplexed signals that outputs basic signals corresponding to the number of multiplexing channels (Iguchi at col. 4, lines 54-58 and col. 5, lines 31-34). Thus, Iguchi does not disclose subdividing each channel signal.

Thus, none of the cited references discloses the time-divisionally dividing feature of the present invention.

On January 17, 2003, the undersigned conducted an Examiner Interview with Examiner Nguyen. During the Examiner interview, the Examiner asserted that the combination of the data multiplexing and separating circuits 21 and 23 of Nishimura discloses the time-divisionally dividing feature of the present invention, and that the feature of time-divisionally dividing the terminal-unit signal within each time slot is merely a Time Division Multiple Access (TDMA) technique.

However, the Nishimura reference merely relates to a general standard of the TDMA technique. It is well known in the art that with the TDMA technique, if data A, B, and C are multiplexed, the time-divisionally multiplexed data are demultiplexed into the original data A, B, and C. ]

In contrast, according to the present invention, the time-divisionally multiplexed data are demultiplexed into not the original data A, B, and C, but into unit data A1, A2, A3, B1, B2, etc., which are smaller than each original data A, B, or C. Thus, when the data A, B, and C are multiplexed in the present invention, the multiplexed data are demultiplexed into unit data smaller than the original data A, B, or C. || < \*

Therefore, Applicant submits that claims 22 and 23 patentably distinguish over the prior art. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejections under §§ 102 and 103.

### **CONCLUSION**

It is submitted that none of the references, either taken alone or in combination, teach the present claimed invention. Thus, claims 22 and 23 are deemed to be in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Serial No. 08/796,752

Docket No. 614.1804

Finally, if there are any additional fees associated with filing of this Response, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: Feb. 3, 2003

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